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1 : Immunology 1993 Jan;78(1):65-73

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## Characterization of T-cell responses to the house dust mite aller Der p II in mice. Evidence for major and cryptic epitopes.

Hoyne GF, Callow MG, Kuo MC, Thomas WR

Western Australian Research Institute for Child Health, Princess Margaret Hospital for Children, Perth.

Major histocompatibility complex (MHC) congenic strains can be defined a and low responders to the major house dust mite allergen Der p II on the ba the ability to sensitize T cells for in vitro lymphokine release. Mice of the H haplotype were high responders, H-2k were intermediate and H-2d low responders. Like responses to other proteins, only a limited number of epito could be located by the response of T cells from mice immunized with aller a series of overlapping peptides. The epitopes for H-2b mice were 11-35, 78 and 105-129, 36-50 and 78-104 for H-2k mice and 36-60 for H-2d. Immuni with the peptides however revealed that spleen-adherent cells were required lymph node cells to recall responses to the whole protein and in addition tha could be sensitized by cryptic epitopes defined by peptides 22-50 and 1-20 f 2b mice. Peptides containing these cryptic epitopes did not normally induce responses in mice primed with the allergen, but when they were used for immunizing they could prime mice for responses to the peptide and the who allergen. The results both help to define a model for studying the presentatio allergens and have significant implications for peptide-based immunotherap

PMID: 7679663, UI: 93170864

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GGG CAGG-TAG GACTTCG TCGGTAG GCGTGGGATCCGGGGG GCGTATTATTTAGGTGCGT GCGT  
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Nucleotide

BLAST PubMed Nucleotide Protein Genome Structure PopSet Taxonomy Help  
Sequence 79 from patent US 5776761

## Views:

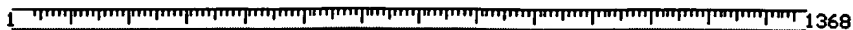
Accession: [AR016640](#)  
Total Bases Sequenced: 1368 bp  
Completed: Dec 5, 1998.

GenBank view

US PATENT: [5776761](#)

FASTA view

ASN.1 view



## Legend:

||||| - 100-200-...

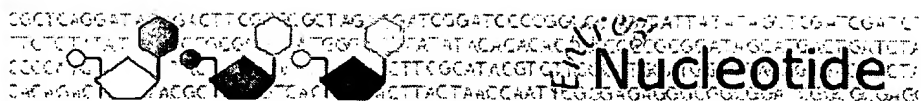
Unknown. Unclassified.

**Nucleic acids encoding allergenic proteins from ragweed**

Rogers,B., Klapper,D.G., Rafnar,T. and Kuo,M.  
Patent: US 5776761-A 79 07-JUL-1998;

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Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)



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1 : AR016640 . Sequence 79 from p...[gi:3972917]

Related Sequences

LOCUS AR016640 1368 bp DNA PAT 05-DEC-1998

DEFINITION Sequence 79 from patent US 5776761.

ACCESSION AR016640

VERSION AR016640.1 GI:3972917

KEYWORDS .

SOURCE Unknown.

ORGANISM Unknown.

Unclassified.

REFERENCE 1 (bases 1 to 1368)

AUTHORS Rogers,B., Klapper,D.G., Rafnar,T. and Kuo,M.

TITLE Nucleic acids encoding allergenic proteins from ragweed

JOURNAL Patent: US 5776761-A 79 07-JUL-1998;

FEATURES Location/Qualifiers

source 1..1368

/organism="unknown"

BASE COUNT 397 a 286 c 327 g 358 t

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1321 tagagaagag tgtctttgat caactacatt ttatggtttt tatattaa

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**Ambrosia artemisiifolia allergen Amb a VI (Amb-a-VI) mRNA, complete cds**

**Views:**

**GenBank view**

**Accession:** U89793

**Total Bases Sequenced: 357 bp**

**Completed: Apr 1, 1997.**

CDS with gene  
and mRNA

Refresh

gene, tRNA,  
promoter...

FASTA view

### ASN.1 view

### Other features

## Coding Regions

**Legend:**

## Feature table

**Organism:** Ambrosia artemisiifolia

Genetic Code: 1

Lineage: Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; euphyllophytes; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids II; Asterales; Asteraceae; Asteroideae; Heliantheae; Ambrosia.

## Cloning and Expression of Ragweed Allergen Amb a VI

Hiller, K.M., Lubahn, B.C. and Klapper, D.G.

Unpublished

## Direct Submission

Hiller, K.M. and Lubahn, B.C.

Submitted (17-FEB-1997) Micro & Immuno, UNC-CH, CB#7290 631 FLOB, Chapel Hill, NC 27599, USA

*Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)*



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**1 : U89793 . Ambrosia artemisii...[gi:1916291]**

## Protein

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LOCUS       AAU89793                357 bp      mRNA           PLN           01-APR-1997
DEFINITION   Ambrosia artemisiifolia allergen Amb a VI (Amb-a-VI) mRNA, complete cds.
ACCESSION    U89793
VERSION      U89793.1   GI:1916291
KEYWORDS     .
SOURCE       common ragweed.
  ORGANISM   Ambrosia artemisiifolia
              Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
              euphyllophytes; Spermatophyta; Magnoliophyta; eudicotyledons; core
              eudicots; Asteridae; euasterids II; Asterales; Asteraceae;
              Asteroideae; Heliantheae; Ambrosia.
REFERENCE    1 (bases 1 to 357)
  AUTHORS    Hiller,K.M., Lubahn,B.C. and Klapper,D.G.
  TITLE      Cloning and Expression of Ragweed Allergen Amb a VI
  JOURNAL    Unpublished
REFERENCE    2 (bases 1 to 357)
  AUTHORS    Hiller,K.M. and Lubahn,B.C.
  TITLE      Direct Submission
  JOURNAL    Submitted (17-FEB-1997) Micro & Immuno, UNC-CH, CB#7290 631 FLOB,
              Chapel Hill, NC 27599, USA
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BASE COUNT        100 a         81 c         81 g         95 t
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    121 gcaggtttct taacgggtca ggagccaagc aaggcggtgt gcacaggagt caacaatctt
    181 aataactcga gaaaaaccaa agctgatcgt gtggccgtct gcaactgtat caaagaattg
    241 acaaaatcga ttgcttacga tccaacacgt atgcctcttc tgtctacgaa atgtggcggt
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**major fecal allergen Der p I - house-dust mite (*Dermatophagoides pteronyssinus*) (fragments)**

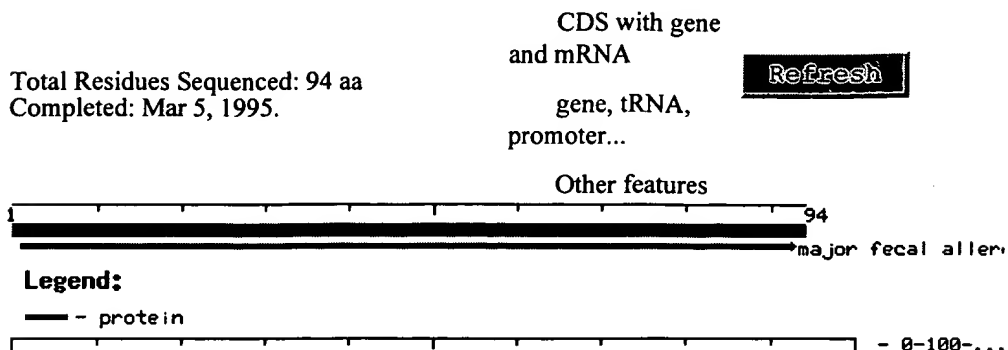
**Views:**

[GenBank view](#)

[FASTA view](#)

[ASN.1 view](#)

[Feature table](#)



Organism: *Dermatophagoides pteronyssinus*

Genetic Code: 1

Lineage: Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acari; Acariformes; Sarcoptiformes; Astigmata; Analgoidea; Pyroglyphidae; Dermatophagoides.

**Structural studies on the allergen Der p1 from the house dust mite *Dermatophagoides pteronyssinus*: similarity with cysteine proteinases**



Simpson, R.J., Nice, E.C., Moritz, R.L. and Stewart, G.A.

Protein Seq. Data Anal. 2 (1), 17-21 (1989)

89098855

Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)



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1 : S03380 . major fecal allerg...[gi:1078971]

PubMed, Related Sequences

LOCUS S03380 94 aa INV 01-SEP-1995  
DEFINITION major fecal allergen Der p I - house-dust mite (Dermatophagoides pteronyssinus) (fragments).  
ACCESSION S03380  
PID g1078971  
VERSION S03380 GI:1078971  
DBSOURCE pir: locus S03380;  
summary: #length 94 #checksum 3067;  
PIR dates: 05-Mar-1995 #sequence\_revision 01-Sep-1995 #text\_change 01-Sep-1995;  
punctuation in sequence.

KEYWORDS .  
SOURCE Dermatophagoides pteronyssinus.  
ORGANISM Dermatophagoides pteronyssinus  
Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acari;  
Acariformes; Sarcoptiformes; Astigmata; Analgoidea; Pyroglyphidae;  
Dermatophagoides.

REFERENCE 1 (residues 1 to 94)  
AUTHORS Simpson,R.J., Nice,E.C., Moritz,R.L. and Stewart,G.A.  
TITLE Structural studies on the allergen Der p1 from the house dust mite Dermatophagoides pteronyssinus: similarity with cysteine proteinases  
JOURNAL Protein Seq. Data Anal. 2 (1), 17-21 (1989)  
MEDLINE 89098855

FEATURES  
Location/Qualifiers  
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Protein 1..94  
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61 fgisnycqiy ppnankdngy qpnxavniv gyxn  
//

Revised: January 10, 2000.

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**Dermatophagoides farinae mRNA for mite allergen Der f II precursor, partial cds, clone:pFL11**

**Views:**

**GenBank view**

FASTA view

### ASN.1 view

## Coding Regions

## Feature table

**Accession:** D10449

**Total Bases Sequenced: 485 bp**

Completed: Apr 28, 1993.

CDS with gene  
and mRNA

gene, tRNA,  
promoter...

Refresh

## Other features



**Legend:**

 - CDS     - other feature  
 - 100-200-...

Organism: Dermatophagoides farinae

**Genetic Code: 1**

Lineage: Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acari; Acariformes; Sarcoptiformes; Astigmata; Analgoidea; Pyroglyphidae; Dermatophagoides.

## Cloning and expression of cDNA coding for the major house dust mite allergen Der f II in *Escherichia coli*

Yuuki, T., Okumura, Y., Ando, T., Yamakawa, H., Suko, M., Haida, M. and Okudaira, H.

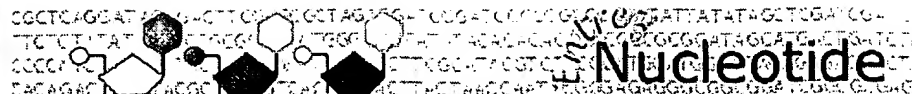
Agric. Biol. Chem. 55 (5), 1233-1238 (1991)  
91291341

## Direct Submission

Yuuki, T.

Submitted (31-JAN-1992) to the DDBJ/EMBL/GenBank databases. Toshifumi Yuuki, Asahi Breweries, Ltd., Central Research Laboratories; 2-13-1, Ohmori-kita, Ohta-ku, Tokyo 143, Japan (Tel:03-5493-3255, Fax:03-5493-7027)

*Comments and suggestions to: [info@ncbi.nlm.nih.gov]*



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1 : D10449 . Dermatophagoides f...[gi:217307]

PubMed, Protein, Related Sequences

LOCUS DEPDER3 485 bp mRNA INV 01-FEB-2000  
 DEFINITION Dermatophagoides farinae mRNA for mite allergen Der f II precursor partial cds, clone:pFL11.  
 ACCESSION D10449  
 VERSION D10449.1 GI:217307  
 KEYWORDS Der II major allergen group; Der f II; mite allergen.  
 SOURCE Dermatophagoides farinae cDNA to mRNA, clone:pFL11.  
 ORGANISM Dermatophagoides farinae  
 Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acari; Acariformes; Sarcoptiformes; Astigmata; Analgoidea; Pyroglyphidae; Dermatophagoides.  
 REFERENCE 1 (bases 1 to 485)  
 AUTHORS Yuuki,T., Okumura,Y., Ando,T., Yamakawa,H., Suko,M., Haida,M. and Okudaira,H.  
 TITLE Cloning and expression of cDNA coding for the major house dust mit allergen Der f II in Escherichia coli  
 JOURNAL Agric. Biol. Chem. 55 (5), 1233-1238 (1991)  
 MEDLINE 91291341  
 REFERENCE 2 (bases 1 to 485)  
 AUTHORS Yuuki,T.  
 TITLE Direct Submission  
 JOURNAL Submitted (31-JAN-1992) to the DDBJ/EMBL/GenBank databases. Toshifumi Yuuki, Asahi Breweries, Ltd., Central Research Laboratories; 2-13-1, Ohmori-kita, Ohta-ku, Tokyo 143, Japan (Tel:03-5493-3255, Fax:03-5493-7027)  
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481 gaatc
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CGCTCAGGATACCGACTTCCTCCGCTAGTCGATCGGATCCCGGCAACCTATTATAGCTCGATCGATCT  
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### Human gene for muscarinic acetylcholine receptor HM4

#### Views:

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[Feature table](#)

Accession: [X15266](#)

Total Bases Sequenced: 1913 bp

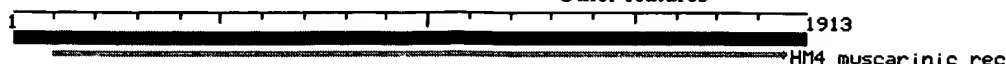
Completed: Feb 19, 1990.

CDS with gene  
and mRNA

[Refresh](#)

gene, tRNA,  
promoter...

Other features



#### Legend:

— CDS

— 1000-2000-...

Organism: [Homo sapiens](#)

Genetic Code: [1](#)

Lineage: Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria;  
Primates; Catarrhini; Hominidae; Homo.

#### Distinct primary structures, ligand-binding properties and tissue-specific expression of four human muscarinic acetylcholine receptors

Peralta, E.G., Ashkenazi, A., Winslow, J.W., Smith, D.H., Ramachandran, J. and Capon, D.J.  
EMBO J. 6 (13), 3923-3929 (1987)

88166632

COMMENT See X15263-15266 for other human muscarinic acetylcholine receptor genes.

Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)



301 agtgggtcttc atcgctttct taacgggcat cctggccttg gtgaccatca tcggcaacat  
361 cctggtaatt gtgtcattta aggtcaacaa gcagctgaag acggtcaaca actacttcct  
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BLAST PubMed Nucleotide Protein Genome Structure PopSet Taxonomy Help  
**collagen alpha 3(IV) chain precursor, long splice form - human**

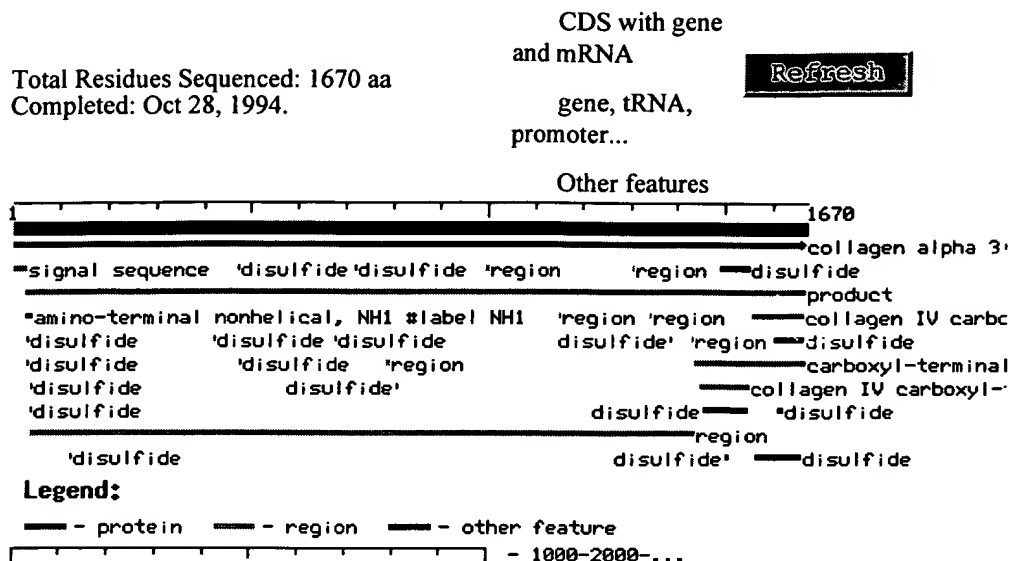
## Views:

GenBank view

FASTA view

ASN.1 view

Feature table

Organism: Homo sapiensGenetic Code: 1

Lineage: Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

**Sequence and localization of a partial cDNA encoding the human alpha 3 chain of type IV collagen**

Morrison, K.E., Mariyama, M., Yang-Feng, T.L. and Reeders, S.T.  
 Am. J. Hum. Genet. 49 (3), 545-554 (1991)  
[91353570](#)

**Molecular cloning of the human Goodpasture antigen demonstrates it to be the alpha 3 chain of type IV collagen**

Turner, N., Mason, P.J., Brown, R., Fox, M., Povey, S., Rees, A. and Pusey, C.D.  
 J. Clin. Invest. 89 (2), 592-601 (1992)  
[92147878](#)

**Exon/intron structure of the human alpha 3(IV) gene encompassing the Goodpasture antigen (alpha 3(IV)NC1). Identification of a potentially antigenic region at the triple helix/NC1 domain junction**

Quinones, S., Bernal, D., Garcia-Sogo, M., Elena, S.F. and Saus, J.  
 J. Biol. Chem. 267 (28), 19780-19784 (1992)  
[93015826](#)

**The human mRNA encoding the Goodpasture antigen is alternatively spliced**

Bernal, D., Quinones, S. and Saus, J.  
 J. Biol. Chem. 268 (16), 12090-12094 (1993)  
[93280184](#)

**Exon/intron structure of the human alpha 3(IV) gene encompassing the Goodpasture antigen (alpha 3(IV)NC1). Identification of a potentially antigenic region at the triple helix/NC1 domain junction**

Quinones,S., Bernal,D., Garcia-Sogo,M., Elena,S.F. and Saus,J.  
J. Biol. Chem. 269 (25), 17358 (1994)  
94274734

**Complete primary structure of the human alpha 3(IV) collagen chain. Coexpression of the alpha 3(IV) and alpha 4(IV) collagen chains in human tissues**  
Mariyama,M., Leinonen,A., Mochizuki,T., Tryggvason,K. and Reenders,S.T.  
J. Biol. Chem. 269 (37), 23013-23017 (1994)  
94364994

**COMMENT** Prolines and lysines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated to varying extents. Prolines are predominately 4-hydroxylated. Lysines are 5-hydroxylated and subsequently O-glycosylated. In Goodpasture's syndrome, an autoimmune response develops against an epitope in the carboxyl-terminal nonhelical NC1 domain. This minor type IV collagen is thought to form a heterotrimer of two alpha 3(IV) chains and one alpha 4(IV) chain (see PIR:CGHU1B). A polymeric network forms with tetrameric associations among trimer amino-terminal domains (with disulfide and desmosine cross-links), dimeric associations among trimer carboxyl-terminal domains (with disulfide bonds), and both intra-trimer and inter-trimer associations in the interrupted helical domain (with disulfide and desmosine cross-links).

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*Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)*



PubMed

Nucleotide

Protein

Genome

Structure

PopSet

 Search  for   

Limits

Preview/Index

History

Clipboard

Display

1 : CGHU3B . collagen alpha 3(I...[gi:1360672]

PubMed, Related Sequences

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 VERSION CGHU3B GI:1360672  
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 OMIM:120070 #map\_position 2q36-2q37 #introns 1385/1; 1418/1;  
 1488/1; 1547/2; 1585/3; 1643/2 #note the alpha 3(IV) and alpha  
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 promotor regions; defects in this gene can result in recessive for  
 Alport's syndrome #status incomplete;  
 superfamily: collagen alpha 1(IV) chain;  
 PIR dates: 28-Oct-1994 #sequence\_revision 03-Oct-1995 #text\_change  
 22-Jun-1999.

KEYWORDS alternative splicing; basement membrane; cell binding; coiled coil  
 extracellular matrix; glycoprotein; hydroxylysine; hydroxyproline;  
 trimer; triple helix.

SOURCE human.  
 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;  
 Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (residues 1 to 1670)  
 AUTHORS Morrison,K.E., Mariyama,M., Yang-Feng,T.L. and Reeder,S.T.  
 TITLE Sequence and localization of a partial cDNA encoding the human  
 alpha 3 chain of type IV collagen  
 JOURNAL Am. J. Hum. Genet. 49 (3), 545-554 (1991)  
 MEDLINE 91353570

REFERENCE 2 (residues 1 to 1670)  
 AUTHORS Turner,N., Mason,P.J., Brown,R., Fox,M., Povey,S., Rees,A. and  
 Pusey,C.D.  
 TITLE Molecular cloning of the human Goodpasture antigen demonstrates it  
 to be the alpha 3 chain of type IV collagen  
 JOURNAL J. Clin. Invest. 89 (2), 592-601 (1992)  
 MEDLINE 92147878

REFERENCE 3 (residues 1 to 1670)  
 AUTHORS Quinones,S., Bernal,D., Garcia-Sogo,M., Elena,S.F. and Saus,J.  
 TITLE Exon/intron structure of the human alpha 3(IV) gene encompassing  
 the Goodpasture antigen (alpha 3(IV)NC1). Identification of a  
 potentially antigenic region at the triple helix/NC1 domain  
 junction  
 JOURNAL J. Biol. Chem. 267 (28), 19780-19784 (1992)  
 MEDLINE 93015826

REMARK Erratum:[published erratum appears in J Biol Chem 1994 Jun  
 24;269(25):17358]]

REFERENCE 4 (residues 1 to 1670)  
 AUTHORS Bernal,D., Quinones,S. and Saus,J.

TITLE The human mRNA encoding the Goodpasture antigen is alternatively spliced  
 JOURNAL J. Biol. Chem. 268 (16), 12090-12094 (1993)  
 MEDLINE 93280184  
 REFERENCE 5 (residues 1 to 1670)  
 AUTHORS Quinones,S., Bernal,D., Garcia-Sogo,M., Elena,S.F. and Saus,J.  
 TITLE Exon/intron structure of the human alpha 3(IV) gene encompassing the Goodpasture antigen (alpha 3(IV)NC1). Identification of a potentially antigenic region at the triple helix/NC1 domain junction  
 JOURNAL J. Biol. Chem. 269 (25), 17358 (1994)  
 MEDLINE 94274734  
 REMARK annotation; erratum; correction to intronic sequence in A44043  
 REFERENCE 6 (residues 1 to 1670)  
 AUTHORS Mariyama,M., Leinonen,A., Mochizuki,T., Tryggvason,K. and Reeders,S.T.  
 TITLE Complete primary structure of the human alpha 3(IV) collagen chain  
 Coexpression of the alpha 3(IV) and alpha 4(IV) collagen chains in human tissues  
 JOURNAL J. Biol. Chem. 269 (37), 23013-23017 (1994)  
 MEDLINE 94364994  
 COMMENT Prolines and lysines at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated to varying extents. Prolines are predominately 4-hydroxylated. Lysines are 5-hydroxylated and subsequently O-glycosylated. In Goodpasture's syndrome, an autoimmune response develops against an epitope in the carboxyl-terminal nonhelical NC1 domain. This minor type IV collagen is thought to form a heterotrimer of two alpha 3(IV) chains and one alpha 4(IV) chain (see PIR:CGHU1B). A polymeric network forms with tetrameric associations among trimer amino-terminal domains (with disulfide and desmosine cross-links), dimeric associations among trimer carboxyl-terminal domains (with disulfide bonds), and both intra-trimer and inter-trimer associations in the interrupted helical domain (with disulfide and desmosine cross-links).  
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Display	GenPept	Save	Text	Add to Clipboard
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Revised: January 10, 2000.

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**Nucleotide**

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**Ku autoantigen p70 subunit [human, mRNA, 2123 nt]**

**Views:**

**GenBank view**

Accession: S38729  
Total Bases Sequenced: 2123 bp  
Completed: May 8, 1993.

CDS with gene  
and mRNA

Refresh

gene, tRNA,  
promoter...

FASTA view

### ASN.1 view

## Other features

## Coding Regions

**Legend:**

~~containing~~ - CDS      ~~containing~~ - gene

## Feature table

1 2123  
Ku autoantigen p70 subunit  
Legend:  
- CDS - gene  
- 1000-2000-...

**Links:**

**LocusLink**

Organism: Homo sapiens


Genetic Code: 1

Lineage: Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

**Nucleotide sequence and genomic structure analyses of the p70 subunit of the human Ku autoantigen: evidence for a family of genes encoding Ku (p70)-related polypeptides**  
Griffith,A.J., Craft,J., Evans,J., Mimori,T. and Hardin,J.A.  
Mol. Biol. Rep. 16 (2), 91-97 (1992)  
92301477

---

*Comments and suggestions to: [info@ncbi.nlm.nih.gov]*



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[Genome](#)
[Structure](#)
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1 : S38729 . Ku autoantigen p70...[gi:250496]
[PubMed](#), [Protein](#), [Related Sequences](#), [LinkOut](#)

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 DEFINITION Ku autoantigen p70 subunit [human, mRNA, 2123 nt].  
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 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;  
 Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (bases 1 to 2123)  
 AUTHORS Griffith,A.J., Craft,J., Evans,J., Mimori,T. and Hardin,J.A.  
 TITLE Nucleotide sequence and genomic structure analyses of the p70  
 subunit of the human Ku autoantigen: evidence for a family of gene  
 encoding Ku (p70)-related polypeptides  
 JOURNAL Mol. Biol. Rep. 16 (2), 91-97 (1992)  
 MEDLINE 92301477  
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 This sequence comes from Fig. 3.  
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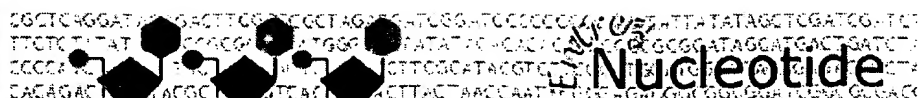
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Revised: May 2, 2000.

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**Homo sapiens myelin-associated oligodendrocyte basic protein (MOBP) mRNA**

## Feature table



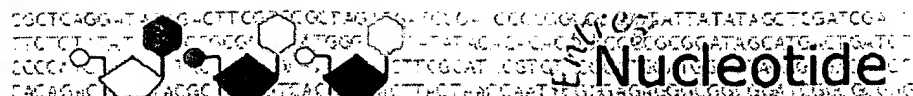
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100-200-...

Lineage: Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

**Cloning and expression of myelin-associated oligodendrocytic basic protein. A novel basic protein constituting the central nervous system myelin**  
Yamamoto, Y., Mizuno, R., Nishimura, T., Ogawa, Y., Yoshikawa, H., Fujimura, H., Adachi, E., Kishimoto, T., Yanagihara, T. and Sakoda, S.  
J. Biol. Chem. 269 (50), 31725-31730 (1994)  
95081123

**COMMENT** REFSEQ: This reference sequence was derived from D28113.1. PROVISIONAL RefSeq: This is a provisional reference sequence record that has not yet been subject to human review. The final curated reference sequence record may be somewhat different from this one.

*Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)*



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1 : [NM\\_006501](#) . Homo sapiens myeli...[gi:5729930][PubMed](#), [Protein](#), [Related Sequences](#), [LinkOut](#)

LOCUS NM\_006501 915 bp mRNA PRI 10-AUG-1999  
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 ACCESSION NM\_006501  
 VERSION NM\_006501.1 GI:5729930  
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 ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;  
 Eutheria; Primates; Catarrhini; Hominidae; Homo.  
 REFERENCE 1 (sites)  
 AUTHORS Yamamoto,Y., Mizuno,R., Nishimura,T., Ogawa,Y., Yoshikawa,H.,  
 Fujimura,H., Adachi,E., Kishimoto,T., Yanagihara,T. and Sakoda,S.  
 TITLE Cloning and expression of myelin-associated oligodendrocytic basic  
 protein. A novel basic protein constituting the central nervous  
 system myelin  
 JOURNAL J. Biol. Chem. 269 (50), 31725-31730 (1994)  
 MEDLINE 95081123  
 COMMENT REFSEQ: This reference sequence was derived from D28113.1.  
 PROVISIONAL RefSeq: This is a provisional reference sequence recor  
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Revised: May 2, 2000.

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BLAST PubMed Nucleotide Protein Genome Structure PopSet Taxonomy Help  
**Human mRNA for thyroglobulin**

## Views:

GenBank view

FASTA view

ASN.1 view

Coding Regions

Feature table

Accession: [X05615](#)  
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Completed: Apr 2, 1988.

CDS with gene  
and mRNA

gene, tRNA,  
promoter...

[Refresh](#)

Other features



## Legend:

— CDS — other feature  
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Catarrhini; Hominidae; Homo.**Primary structure of human thyroglobulin deduced from the sequence of its 8448-base complementary DNA**

Malthiery, Y. and Lissitzky, S.

Eur. J. Biochem. 165 (3), 491-498 (1987)

[87246630](#)**Direct Submission**

Malthiery, Y.

Submitted (07-APR-1988) to the EMBL/GenBank/DDBJ databases

**A major human thyroglobulin epitope defined with monoclonal antibodies is mainly recognized by human autoantibodies**

Henry, M., Zanelli, E., Piechaczyk, M., Pau, B. and Malthiery, Y.

Eur. J. Immunol. 22 (2), 315-319 (1992)

[92164705](#)**COMMENT** patient); Data kindly reviewed (07-APR-1988) by Malthiery Y.

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Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)



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7741 actccacgga tgactatgcc tccttctccc gggctctgga gaatgccacc cgggactact
7801 ttatcatctg ccctataatc gacatggcca gtgcctgggc aaagagggcc cgaggaaacg
```

```
7861 tcttcatgta ccatgctcct gaaaactacg gccatggcag cctggagctg ctggcggatg
7921 ttcagtttgc cttggggctt ccttctacc cagcctacga ggggcagttt tctctggagg
7981 agaagagcct gtcgctgaaa atcatgcagt acttttccca cttcatcaga tcaggaaatc
8041 ccaactaccc ttatgagttc tcacggaaaag taccacatt tgcaaccccc tggcctgact
8101 ttgtaccccg tgctggtgga gagaactaca aggagttcag tgagctgctc cccaatcgac
8161 agggcctgaa gaaagccgac tgctccttct ggtccaagta catctcgtct ctgaagacat
8221 ctgcagatgg agccaagggc gggcagtcag cagagagtga agaggaggag ttgacggctg
8281 gatctgggct aagagaagat ctcctaagcc tccaggaacc aggctctaag acctacagca
8341 agtgaccagc ccttgagctc cccaaaaacc tcaccgagg ctgcccacta tggtcattct
8401 tttctctaaa atagttactt accttcaata aagtatctac atgcggtg
```

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**H.sapiens mRNA for put. B7,3 molecule of CD80-CD60 protein family**

### Views:

**GenBank view**

Accession: Y07827  
Total Bases Sequenced: 1182 bp  
Completed: Jan 8, 1997.

CDS with gene  
and mRNA

gene, tRNA,  
promoter...

Refresh

FASTA view

### ASN.1 view


## Other features

## Coding Regions

1182  
put. B7,3 molecule

**Legend:**

## Feature table

 - CDS  
 - 100-200-...

**Organism:** *Homo sapiens*

Genetic Code: 1

Lineage: Eukaryota; Metazoa; Chordata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.

## **Cloning, structural analysis and mapping of B30 and B7 family members, to the MHC and other chromosomal regions. Toward the identification of the ancestral major histocompatibility complex**

Henry, J., Ribouchon, M.T., Depetris, D., Mattei, M.G., Offer, C., Tazi-Ahnini, R. and Pantarotti, P.  
Unpublished

## Direct Submission

Pontarotti, P.

Submitted (06-SEP-1996) P. Pontarotti, Unite 119 INSERM, 27 bd.Lei Roure, 13009  
Marseille, FRANCE

*Comments and suggestions to: [\[info@ncbi.nlm.nih.gov\]](mailto:info@ncbi.nlm.nih.gov)*



```

241 cctgtcacc tgttcccgac catgagtga gagaccatgg agctgaagtg ggtaagttcc
301 agcctaaggc aggtggtgaa cgtgtatgca gatggaaagg aagtgggaaga caggcagagt
361 gcaccgtatc gagggagaaac ttcgattctg cgggatggca tcaactgcagg gaaggctgct
421 ttccgaatac acaacgtcac aggctctgac aggtggaagt acctgtgtta ttccaagat
481 ggtgacttct atgaaaaagc cctggtggag ctgaagggtg cagcactggg ttctgatctt
541 cacgttgatg tgaagggtta caaggatgga gggatccatc tggagtgcag gtccactggc
601 tggtaacccc aaccccaa atcagtgagc aacaacaagg gagagaacat cccgactgtg
661 gaagcacctg tggttgcaga cggagtgggc ctgtatgcag tagcagcatc tgtgatcatg
721 agaggcagct ctggggaggg tgtatcctgt accatcagaa attccctcct cggcctggaa
781 aagacagcca gcatttccat cgcaagaccc ttcttcagga gcgccagag gtggatcgcc
841 gccctggcag ggacctgcc tgtcttctg ctgctcctg ggggagccgg ttacttctg
901 tggcaacagc aggaggaaaa aaagactcag ttcagaaaga aaaagagaga gcaagagttg
961 agagaaatgg catggagcac aatgaagcaa gaacaaagca caagagtga gctcctggag
1021 gaactcagat ggagaagtat ccagtatgca tctcggggag agagacattc agcctataat
1081 gaatggaaaa aggcctctt caagcctggt gaggaatgc ttcagatgag gctccacttt
1141 gttaaataaa atggatgaat gaaaaaaaaa aaaaaaaaaa aa

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**Nucleotide**

[BLAST](#) [PubMed](#) [Nucleotide](#) [Protein](#) [Genome](#) [Structure](#) [PopSet](#) [Taxonomy](#) [Help](#)

### B.verrucosa mRNA for pollen allergen Bet v 4

**Views:**

**GenBank view**

Accession: Y12560  
Total Bases Sequenced: 496 bp  
Completed: Apr 24, 1997.

CDS with gene  
and mRNA

Refresh

gene, tRNA,  
promoter...

FASTA view

### Other features

### ASN.1 view



## Coding Regions

**Legend:**

— CDS — gene  
— 100-200-...

## Feature table

**Organism:** *Betula pendula*

**Genetic Code: 1**

Lineage: Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; euphyllophytes; Spermatophyta; Magnoliophyta; eudicotyledons; Rosidae; Fagales; Betulaceae; Betula.

## Molecular characterization, expression in *Escherichia coli*, and epitope analysis of a two EF-hand calcium-binding birch pollen allergen, Bet v 4

Twardosz,A., Hayek,B., Seiberler,S., Vangelista,L., Elfman,L., Gronlund,H., Kraft,D. and Valenta,R.

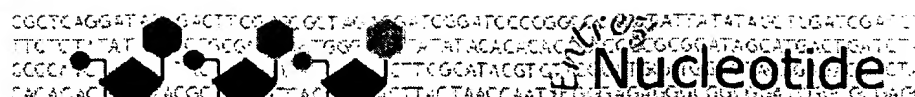
Biochem. Biophys. Res. Commun. 239 (1), 197-204 (1997)  
98005106

## Direct Submission

Valenta, R.

Submitted (14-APR-1997) R. Valenta, Institute of General & Experimental Pathology,  
General Hospital, Waehringer Guertel 18-20, 1090 Vienna, AUSTRIA

*Comments and suggestions to: [info@ncbi.nlm.nih.gov]*



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1 gaattcccaa caacagtgga aacaaaaatg gctgatgatc atccacagga caaggctgaa  
61 cgcgagcgca ttttcaagcg ctttgacgcc aatggcgatg gtaaaatctc tgcagcagag  
121 cttggggagg ccttgaaaac acttggtctc atcacaccgg atgaggtgaa acatatgatg  
181 gctgaagattg acaccgatgg cgacggcttc atttcgttcc aagagttcac qqattttgct

```
241 cgtgctaatac gtggtttact aaaggatggt gccaaagatat tttaatgtct ctgtctcttt
301 ctcttttttg gcatattttc atgtcatgat ctcttggtt agagtgattt attttcatgg
361 ctattgtccg tttggatttt tctcattata gaattatttt tggtagttcg actgtcacct
421 cttgtattct aatatcaatg gtgtttgacc gtattattgt aacaagaaaa tggttcatca
481 aaaaaaaaaa aaaaaa
```

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